## Historical Review

## Robert Campbell in Queen Street, 1897–1920. — Day surgery in the Belfast Hospital for Sick Children

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In a manuscript found among the papers of Robert Campbell by the late William S Campbell we find the words, "1898 — I joined the staff of the Belfast Hospital for Sick Children". This is an error, for it was on 22 September 1897 that Robert Campbell was appointed honorary assistant surgeon on the occasion of the promotion of J S Morrow to be an honorary attending surgeon. This appearance of "Johnny" Morrow as a full surgeon on the staff of the Children's Hospital may surprise those who remember him only as physician (and finally the senior physician) in the Royal Victoria Hospital. In fact Morrow was a surgeon in the Children's Hospital from 1893 until 1898 when he resigned his appointment there, at least partly because of a finger injury, and the vacancy thus created was filled by Robert Campbell's promotion. Campbell thus found himself a full surgeon one year and two weeks after he first joined the staff — a much shorter interval than that suffered by some of his successors.

Campbell's election in 1897 was unanimous for he was the only candidate. His appointment was proposed by Viscount Massereene and Ferrard, a patron and life governor of the hospital. This was highly appropriate, for the noble patron was a descendant of the Sir John Clotworthy who had greatly countenanced the Presbyterians about the Sixmilewater in the early seventeenth century, among whom was Robert's ancestor Hew Campbell. The vacancy for an assistant surgeon which followed Campbell's promotion in 1898 was filled by Andrew Fullerton, who had made a previous unsuccessful attempt to join the staff of the Children's Hospital in 1895, when he had been decisively defeated in an election for the post of assistant physician. Those who remember "Andy" will be able to exercise their imaginations in creating a picture of him as a physician, instead of the dynamic, bustling, purposive surgeon we remember.

Robert Campbell was not the first member of his family to serve on the staff of the Children's Hospital. His elder brother John was an honorary assistant surgeon from February 1891 to December 1892, when he resigned on being appointed

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This address by the late Dr Calwell was found among the archives of the Royal Victoria Hospital by Dr J S Logan. It was probably written soon after 1960 and is published now because of its relevance to the practice of day surgery.

honorary attending physician in the Samaritan Hospital, which post he held for thirty years. The title of the post in the Samaritan Hospital may be misleading to those who are not accustomed to the nomenclature of the days when obstetricians and gynaecologists were still called physicians. I am not sure whether they chose that designation as being more respectable, and conferring a higher professional and social status than accompanied the title "surgeon", or whether the surgeons would not have them in their number. The switch by John Campbell from paediatric surgery to gynaecology is a good example of the versatility of our medical forbears.

When Robert Campbell joined the staff of the Children's Hospital in 1897 the direct links with the medical staff of the first hospital in King Street had not all been severed. No member of the original medical staff was still on the active list, but Brice Smyth was honorary consulting physician. Other members of the King Street staff still connected with the hospital were J W Byers who was the other honorary consulting physician, and W G MacKenzie, honorary attending surgeon. The full surgeons were W G MacKenzie and J S Morrow. The other assistant surgeon was T S Kirk who had been appointed in 1895, at the same meeting of the Board at which Andrew Fullerton had failed in the election for an assistant physician. The number of beds in the hospital was forty which meant that the two full surgeons had charge of twenty surgical beds between them. The assistant surgeons were in charge of outpatients and were also to assist the surgeons when required. They were to attend at such hours as the Board of Management should appoint. The extern was open every morning except Sundays and Christmas Day.

During Robert Campbell's first (and only) year as assistant surgeon, he and his colleagues saw 826 new surgical outpatients and performed 213 minor operations. How much work they did in the wards is not recorded. No separate return of the number of attendances of surgical outpatients is given, but if it was proportionate to the number of new patients it must have been about 3,300. There was no house surgeon to relieve the honorary staff of any part of the burden, and there was only one nurse for the whole extern department. Most of the conditions seen in the children attending the surgical extern in 1898 would be seen in children forty or fifty years later, but proportionately much less frequently and in a very different distribution. Apart from 114 cases of abscess (of unspecified aetiology) the commonest cause of morbidity seems to have been tuberculosis. There were 53 children with caries of bone (spinal caries in 25) and 75 with arthritis (hip 34 and knee 23). Although it is not stated that these conditions were tuberculous, it can safely be assumed that very many of them were, for in the inpatient return for the same period there were 34 cases of tuberculous arthritis. There were only four dislocations, 21 fractures, 17 wounds and six cases of burns or scalds, which shows up very favourably against today's experience of these accidents. However, apart from the absence of the heavy motor car traffic of our time, it is clear that general practitioners were treating most of the casualties at home. Doctors who practised in Belfast at the time (and how much more country doctors) certainly treated simple fractures without recourse to hospital. Enlarged tonsils were recorded in only five children; cleft palate and hare lip in six; genu valgum in 13; necrosis of bone in 17; talipes in 15; ulcers in 16; adenitis (unspecified) in 55. Inquinal hernia was seen in 68, and this condition was soon to attract the special interest of Robert Campbell.

After his short apprenticeship as assistant surgeon Campbell joined T S Kirk in the surgical ward where they shared some twenty beds between them, and in their first complete year together (1899) cared for 234 children of whom 8 died. They performed 252 operations. The most common condition they treated was tuberculous arthritis — 75 cases. There was caries of bone in 36 (probably mostly due to tuberculosis), cleft palate in three, congenital dislocation in one, acute intussusception in one, tuberculous adenitis in 10, talipes in five, but there were only eight cases of inguinal hernia. This last figure is clear evidence that the operative treatment of this condition was still not common, for the outpatients records for that year show that 58 children with the condition were seen in the extern department.

The year of Campbell's appointment as full surgeon also saw the appointment of Miss Amy Isobel McTaggart as matron of the hospital. She came to Belfast from the Royal Edinburgh Hospital for Sick Children. Her tenure of the post was short for in 1906 she resigned to become Robert Campbell's wife. This romantic example was followed in 1908 by T S Kirk who married Miss Constance Rome, Miss McTaggart's successor as matron. Kirk accomplished in 18 months what it took Campbell eight years to accomplish! The Board of Management acknowledged Miss McTaggart's resignation with the following resolution: "That while most heartily congratulating Miss McTaggart on her approaching marriage and wishing her every happiness, the Board desires to place on record its deep sense of the irreparable loss sustained by the Institution in her retirement, after a service of eight years of the most devoted and efficient character". The Board presented Miss McTaggart with a canteen of cutlery and a purse of sovereigns. The medical staff presented her with a silver salver, entrée dish and spoons.

Robert Campbell has been described as a pioneer in paediatric surgery by R W M Strain¹ in his history of the Ulster Medical Society and as "a great general surgeon" by Robert Marshall² in his history of the Royal Victoria Hospital (1903–53). E W McMechan³ says of him, "a man whose work was characterised by great care, skill and originality, and by what has been described as restrained and discriminating boldness. He was among the first to use rubber gloves and certainly introduced them to Belfast. He was using catgut boiled and hardened in formaldehyde some three years before it was generally advocated, and he introduced caps and masks". McMechan related that when the patients were transferred from the Royal Victoria Hospital in Frederick Street to the new hospital on the Grosvenor Road, it was arranged that John Walton Browne, the senior surgeon, would perform the first operation. But on the night before this "opening ceremony" a patient was admitted with a strangulated hernia and Robert Campbell operated on him — an admirable example of junior being prior.

Robert Campbell is best known for his early advocacy of the operative treatment of hernia, even in the youngest infants.<sup>4, 5, 6, 12, 13</sup> Details of this have been given in the late W S Campbell's account of his uncle's life and times.<sup>7</sup> The influence of Campbell's practice can be easily demonstrated from the hospital returns. I have already mentioned that in 1899 only eight operations for inguinal hernia were done. How many of these were for acute conditions such as strangulation it is not now possible to say, but probably all, for we have Robert Campbell's own

statement that when he joined the staff of the Children's Hospital it was not the practice to treat uncomplicated hernias in young children by operation. In his second year, 1900, there were eleven cases of inguinal hernia in the surgical ward, and four of strangulated hernia, which clearly shows a change of practice. The figures for succeeding years reflect the change even more clearly:

Year	Admissions for inguinal hernia		
1902	35	(4 strangulated)	
1903	47	(1 strangulated)	
1904	63	(2 strangulated)	
1907	108		

There cannot have been an epidemic of inguinal hernia in Belfast at the time, nor any remarkable change in diagnostic acumen which led to the discovery of hitherto undiscovered cases. The only reasonable explanation is that for the first time radical and acceptable treatment was being afforded to children who had hitherto been allowed to grow up with their hernias until they were considered old enough to be operated on.

The surgery of childhood was carried a stage further when at the 77th meeting of the British Medical Association held in Belfast in 1909 under the presidency of Sir William Whitla, J H Nicholl<sup>8</sup> of Glasgow advocated that a much larger share of the operative work of Children's Hospitals should be done in the outpatients department. Robert Campbell<sup>6</sup> was in entire agreement "as regards operation on children who could be easily carried home by the mother. He was in the habit of operating in the outpatient department on hernia cases". Andrew Fullerton9 struck a note of warning about possible medico-legal consequences, but said his practice largely agreed with that advocated. "With the authority of such wellknown surgeons as Mr Nicholl, Mr Stiles 10 and Mr Campbell he was sure more work would be done in the outpatient theatre". The matter was referred to further when Fullerton<sup>11</sup> wrote a letter to the British Medical Journal in 1913 recalling the 1909 meeting, and continuing: "So convinced was I by Mr Nicholl's results that I immediately began to add hernia and hydrocele to the list of my outpatient operations, and my colleagues followed the same course. Since then we have enormously extended our scope, and personally I have no hesitation in operating on hare-lip, sometimes cases of cleft palate, knock-knee and bow-leg in children about 4 - 5 years of age, enlarged tonsils, adenoids, naevi and tuberculous joints in the upper extremity, glands, tumours and cysts in the neck and many other conditions requiring surgical interference. A few weeks ago I removed in the outpatients' theatre an occipital meningocele with an entirely successful result. In this way numbers of children are relieved who could not otherwise have been properly treated on account of shortness of beds and lack of funds. The results have borne very favourable comparison with those obtained in the wards, and the utility of the hospital has been greatly increased. The surgeon in charge of outpatients, instead of being a glorified house surgeon or a finger post to the wards, has now opportunities for practice and research hitherto denied him".

Reading this one might doubt who was the pioneer, Robert Campbell or Andrew Fullerton, but study of the available literature, some of which I have quoted, leaves no doubt that it was Robert Campbell who, as well as pioneering the operative treatment of hernia in young children in the wards, had already by 1909 begun to operate on these children as outpatients. Andrew Fullerton no doubt extended the scope of outpatient surgery as he describes. He was not one to sit down and wait until time would bring him promotion and charge of his own beds.

This wide extension of operative surgery in the extern had repercussions. At the end of 1912 a member of the Board drew attention to the "severe" operations being done in the extern theatre, and the risk of sending the patients home immediately. The matter was referred to the medical staff for their views, and Andrew Fullerton (although still a junior member of the surgical staff) was deputed by his colleagues to attend the next meeting of the Board and convey their views. He told the Board that he had been attending the hospital for 15 years and there had never been a death following an operation in the extern department. They had extended their work in the extern department largely following the advice of Mr J H Nicholl<sup>8</sup> of Glasgow. The practice of operating in the extern left the hospital free to do a larger work without increasing the cost. In the case of young infants it was an advantage to have them under the care of their mothers. A majority of operations were for hernia, and on looking up his records he found a cure rate of 95%. The member of the Board who had first raised the matter expressed pride in the magnificent work of the medical staff. "There was to be no curtailment of the work, and as the Staff were working in complete harmony with the Board, the matter would be considered settled".

In the annual report for 1916 the Board recorded that "a very special recognition is due to Mr Robert Campbell, whose work in the wards and extern department has been invaluable, as he has taken on himself the largest part of the burden of the numerous operations performed both in the wards and the extern department, very greatly in excess of the normal calls on his time, owing to the reduction of our staff". This refers to the absence of both outpatient surgeons Andrew Fullerton and P T Crymble on war service in the Forces. The next reference is in the annual report of the Medical staff for 1920 which reads: "During the year the Staff, with deep sorrow and regret, has to report the loss of two members by death, Mr Robert Campbell and Sir John Byers. Mr Campbell was a devoted friend of this Hospital and for the lengthened period of twenty-two years he gave lavishly of his time and great surgical talents to the best interests of the institution".

The Board added: "Mr Robert Campbell, for many years a distinguished member of our Surgical Staff, and who, during The War, when our staff was depleted by the younger men serving, gave of his skill and time most self-sacrificingly". And so Robert Campbell left the scene prematurely, and Andrew Fullerton was elected honorary attending surgeon in his stead.

When Campbell was appointed to the staff of the Belfast Hospital for Sick Children he found it in full commission. It justified the hopes of the founders of the hospital that Campbell, Fullerton and their colleagues, in their time, so advanced the practice of paediatric surgery in the city, not only by hard, conscientious (and unpaid) work, but also by innovation.

The changing surgical practice in the treatment of inguinal hernia following Robert Campbell's appointment to the Belfast Hospital for Sick Children

Year	Treated in Outpatient Department	Treated in Surgical Wards
1892	21	1
1893	report missing	
1894	not stated	1
1895	not stated	1
1896	33	1
1897	46	0
1898	68	10
1899	58	8
1900	57 and 2 strangulated	11 and 4 strangulated
1901		
1902	119	35 and 4 strangulated
1903	167 and 1 strangulated	47 and 1 strangulated
1904	157	63 and 2 strangulated
1905	154 and 1 strangulated	69 and 3 strangulated
1906	197 and 2 strangulated	87
1907	190	108
1908	229	79
1909	157 and 11 strangulated	90 and 1 strangulated
1910	107	93
1911	160	86
1912	108	59
1913	177	54
1914	176	56
1915	192 and 4 strangulated	55 ·
1916	171	51
1917	202	50
1918	178	30
1919	195	12
1920	212	15

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  (A quotation, not a literal one, from the obituary of Robert Campbell by William Calwell. *Br Med J* 1920; 2: 455-6).
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